



# C8000

Advanced Battery Analyzer

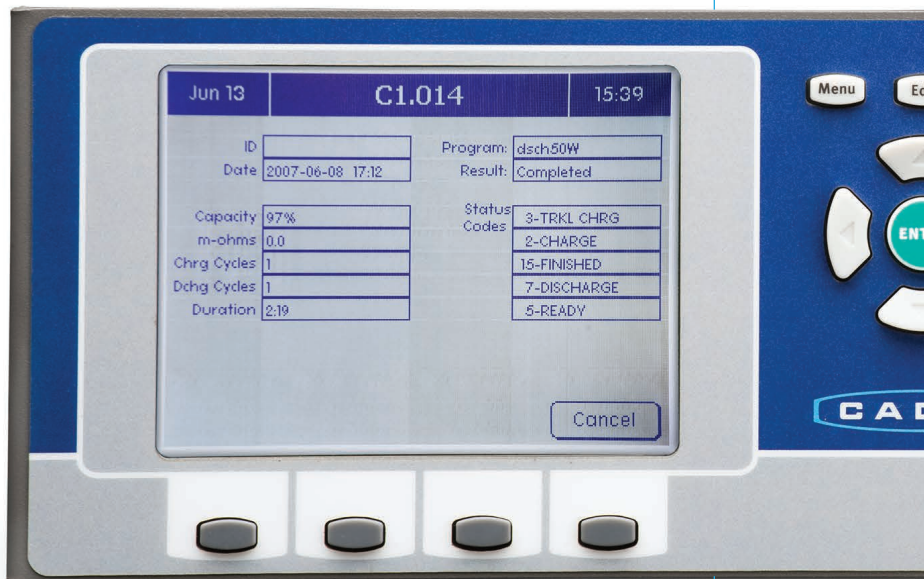
[cadex.com/c8](http://cadex.com/c8)

# AN OUT-OF-THIS-WORLD BATTERY ANALYZER

CREATED FOR ADVANCED USERS

The Cadex C8000 delivers the versatility needed to ensure you get the right performance from the batteries used in your applications. The C8000 is a multi-purpose tool that allows you to optimize batteries at every stage of product life.

ACCEPTS  
**NICKEL  
LEAD-ACID  
LITHIUM**



## THE ULTIMATE BATTERY LAB TOOL

Capture load signatures of power tools and laptops and then perform simulated battery runtime by replaying the stored data. Or add a thermal chamber, external load bank and other accessories.

CONNECT VIA  
**ETHERNET  
SERIAL  
PORT**

## BORN VERSATILE YOUR LAB SWISS KNIFE

UP TO  
**36V, 10A,  
100W**  
PER PORT

CAPACITY RANGE  
**50mAh-  
1,000Ah**

- Choose the right battery by simulating a device
- Characterize the battery thanks to Life Cycle Testing
- Monitor quality and performance with Custom Programming
- Maintain your batteries with built-in Service Programs



**4**  
INDEPENDENT  
CHANNELS

MOUNTING  
OPTIONS  
**DESK & RACK**

## THE SKY IS THE LIMIT

When you acquire a C8000, you're getting one of the most advanced and flexible battery analyzers in the industry. Create your own lab system and transform your C8000 into the command center



# POWERFUL SOFTWARE

## PC-BATTERYLAB™

Cadex PC-BatteryLab™ provides a simple, yet powerful interface to control and monitor the C8000. With a PC, the control shifts from the analyzer's front panel to the PC.

Start programming by entering the battery parameters or choose a battery from the existing built-in database. PC-BatteryLab™ will display the test results using real-time graphics.

Learn more at [cadex.com/batterylab](http://cadex.com/batterylab)

### AT A GLANCE

- Operates up to eight C8000 Analyzers = 32 batteries
- Control and monitor your tester from a PC
- Allows custom program development
- Readings and graphic results in real time
- Manage and print results
- Compatible with Windows XP or later

## SERVICE PROGRAMS

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Format, condition and restore batteries



### AUTO

Exercises batteries and applies recondition if the user-set target capacity cannot be reached (nickel-based batteries)



### PRIME

Prepares batteries for field use by repeated cycling until maximum capacity is reached



### BOOST

Activates seemingly dead batteries



### CHARGE

Applies fast charge; terminates charge when the battery is full; applies trickle charge (depending on battery chemistry)



### EXTENDED PRIME

Applies 16-hour trickle charge prior to Prime. Prepares difficult to charge batteries

## RAPID TESTS

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Checks batteries without discharging



### OHMTEST™

Measure battery resistance with DC pulses (based on IEC61436), 13 seconds



### IMPEDANCE

Measures battery resistance with 1000Hz signal. (Channel 1 only)

## ADVANCED PROGRAMS

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Automated testing for specialty requirements



### WAVEFORM TESTS

GSM, CDMA or customized tests



### RUN TIME

Allows three different discharge levels, programmable in hours and minutes



### LIFE CYCLE

Cycles battery until end-of-life



### SELF-DISCHARGE

Measures self-discharge



### DISCHARGE ONLY

For storage, test applications

## CUSTOM PROGRAMS

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Via PC

If none of the built-in Programs are what you're looking for, you can create your own test routines for your specific requirements.

- 100 Programs — allows up to 100 user-defined programs



# C8000 ANALYZER

The Cadex C8000 is intuitive to use and requires minimal training. Chemistry-specific programs provide safe operation for all major battery types.

Take advantage of a large selection of standard programs or create your own custom routine to meet your exact testing requirement.



## Connectivity

### I/O Capability

- 4 differential analog inputs: up to 50V
- 4 digital inputs: 0-5V
- 2 general purpose analog outputs: 0-5V
- SMBus Enabled: 5 possible termination signals



## Range

### Voltage: Nominal 1.2V – 36V Current:

- Up to 10A charge and discharge
- 20A with Dual Port Power Cables (DPPCs) to combine channels
- Up to 240A discharge with external digital load
- Battery Capacity: 50 mAh – 1000 Ah

### Accuracy:

- Voltage =  $\pm 0.1\%$
- Current =  $\pm 0.25\%$  full scale



## Battery Chemistries

### All standard battery types

- Lead Acid
- Ni-based: NiMH, NiCad
- Li-based: Li-ion, Li-Phosphate



## Accessories

### Cadex Load Capture Unit (LCU)

Part Number: 11-308-0011



Captures load signatures of up to 100A and digitizes the information for reply in the C8000.



External adapter unit



Power and auxiliary port cables



Dual power port cables (DPPC)



## Third Party Accessories



High Power Digital Load



Thermal Chambers



Most Digital and Analog I/O devices



“ We have been using the C8000 for testing many different battery packs from several vendors. The C8000 was extremely easy to setup and start testing batteries in minutes. We typically do cycle life tests which take 50 days and the C8000 has no issues running for months unattended. We have now added another C8000 to our rack system. ”

Jamie Wojcik  
Senior Hardware Engineer  
**1 OAK Technologies**

## UP TO THE HIGHEST STANDARD



### AEROSPACE

Higher power available to test your aircraft batteries



### INDUSTRIAL

Perform a full battery analysis for your tools, and End-of-Line quality control



### MANUFACTURING

Ensure device consistency, cell and pack quality, device simulation and extreme testing



### MILITARY

Deploy only performing batteries by doing regular analysis and conditioning



### RESEARCH

Perform whatever test you wish with extreme programmability, I/O ports to develop your own tools



### UAV/DRONES

Analyze and condition your drone batteries to ensure maximum reliability in the air



DON'T LET A BATTERY STOP YOU

Cadex Electronics, Inc.  
Visit [cadex.com/c8](http://cadex.com/c8) for more information  
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